



U.S. ENVIRONMENTAL PROTECTION AGENCY

TECHNICAL  
ASSISTANCE  
TEAM



EMERGENCY ACTION PLAN  
FOR  
P.R. MALLORY  
CRAWFORDSVILLE, INDIANA



*Region V*

**ROY F. WESTON, INC.**

Spill Prevention & Emergency Response Division  
In Association with Jacobs Engineering Group Inc. Tetra Tech Inc.  
and ICF Incorporated



**WESTON**  
DESIGNERS CONSULTANTS

EMERGENCY ACTION PLAN  
FOR  
P.R. MALLORY  
CRAWFORDSVILLE, INDIANA

Prepared For:  
U.S. Environmental Protection Agency  
Region V  
230 S. Dearborn Street  
Chicago, Illinois

CONTRACT NO. 68-95-0017

TAT-05-F-00977

TDD# 5-8605-10

Prepared by:  
WESTON-SPER  
Technical Assistance Team  
Region V

July 1986

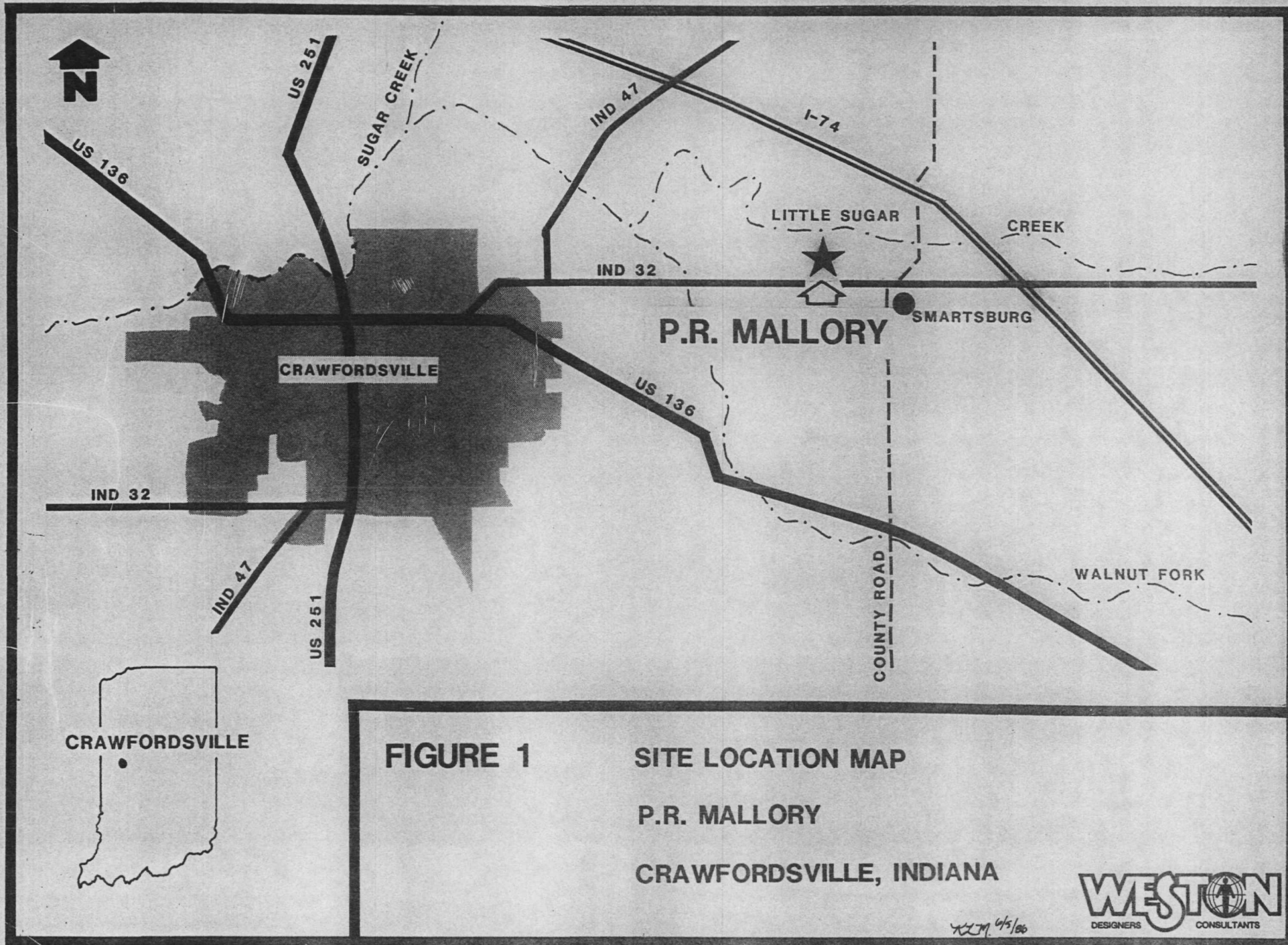
## 1.0 INTRODUCTION

The U. S. Environmental Protection Agency (U.S. EPA) was asked by the Indiana Department of Environmental Management (IDEM) to investigate the P. R. Mallory property in Crawfordsville, Indiana. On May 16, 1986, the U.S. EPA tasked the Technical Assistance Team (TAT) to conduct a site investigation to determine if site conditions pose a serious health threat to the public and/or environment. Information gathered prior to the investigation indicated that the site may contain potential polychlorinated biphenyl (PCB) contamination. This report includes a review of background information, a description of conditions found during the site inspection and recommendations for possible immediate action.

## 2.0 SITE HISTORY

The P.R. Mallory site is located on the north side of State Road 32, approximately 3 1/2 miles east of the City of Crawfordsville, Montgomery County, Indiana (Figure 1). P.R. Mallory manufactured electronic components for diversified applications at the site from its opening in 1957 until June 1969 when a fire destroyed the facility. According to a former employee, Ms. Ilene Dexter, the company's major product line was paper dielectric capacitors. Apparently, the company disposed of defective capacitors in a ravine behind the plant. Kevin Hogan, PCB Coordinator with the Indiana Department of Environmental Management (IDEM), visited the site in October 1985 and again on April 15, 1986. These visits confirmed that the sides of the ravine and the land directly behind the former plant were littered with hundreds of capacitors on the surface. Canisters were collected from the site on April 15, 1986, by IDEM. Analytical results of the dielectric fluid from these canisters confirmed that the capacitors contained polychlorinated biphenyls (PCBs). The results from this analysis are contained in Attachment B. According to Greta Hawvermale (IDEM), the property has changed ownership three times since P.R. Mallory owned the site. The current owner is listed as Terra-Products, Inc., a plastic manufacturing company. Terra-Products, Inc., also owns property contiguous to the western border of the P.R. Mallory site.

Ms. Hawvermale also reported that a previous fire had occurred at the site in April 1968. This fire began in a drying room used to store PCB-filled capacitors. These fires not only furnished an avenue for the off-site migration of PCBs, it also presented the potential for creation of polychlorinated dibenzo-p-dioxins (dioxins) and polychlorinated dibenzofurans (furans). The dioxins and furans are believed to be products of incomplete combustion from the burning of PCBs, as occurred at this site.



Upon further investigation of the site history, two potential responsible parties were identified. These are Mallory Capacitor Company, a division of Emhart Corporation of Hartford, Connecticut, and Duracell Inc., a division of Dart and Kraft, Inc., of Northbrook, Illinois. This information has been submitted to the U. S. EPA, CERCLA Enforcement Section for possible action.

### 3.0 SITE ASSESSMENT

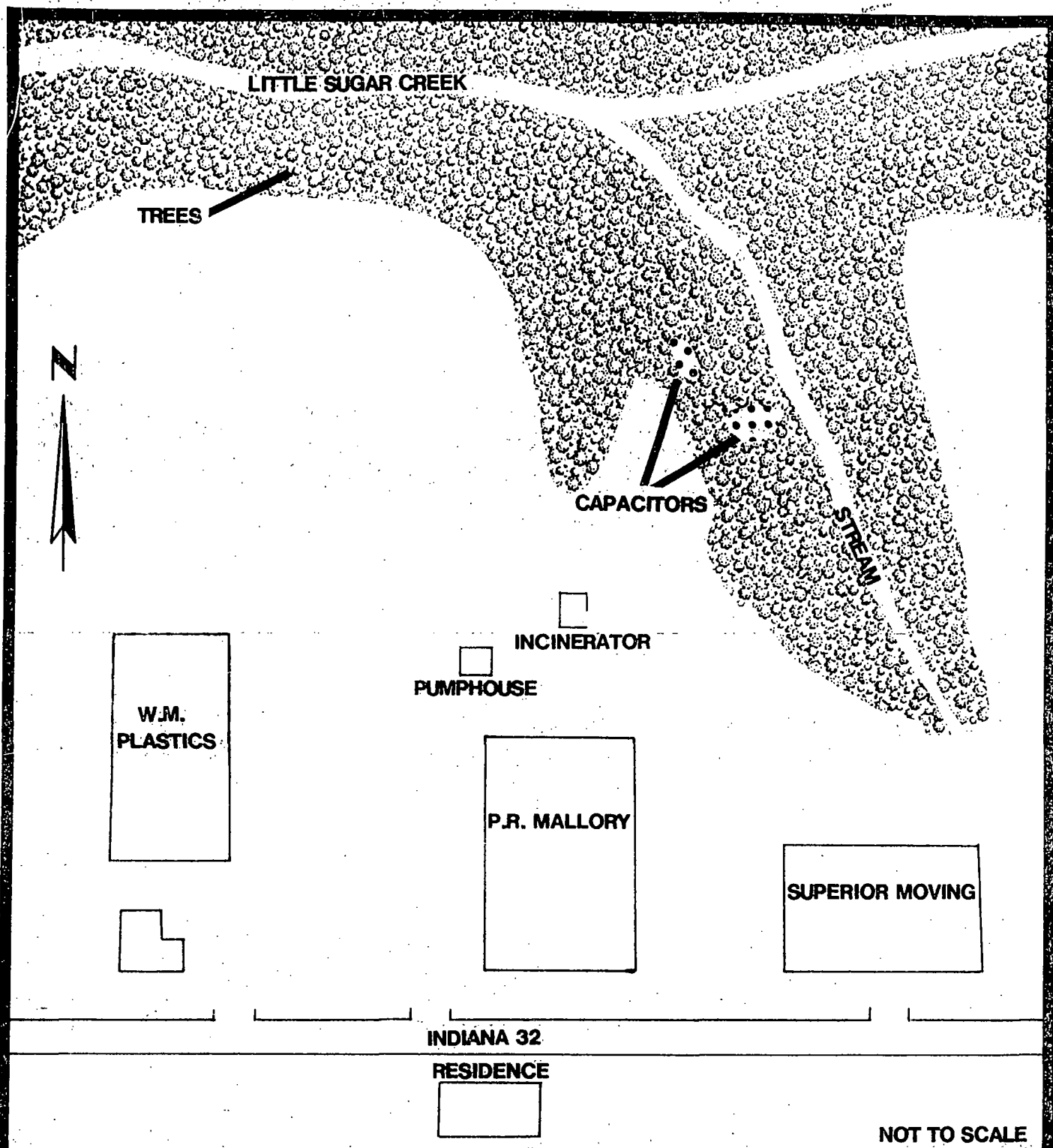
#### 3.1 Site Description

On May 16, 1986, the U.S. Environmental Protection Agency (U.S. EPA) tasked the Technical Assistance Team (TAT) to conduct a site assessment of the P.R. Mallory site. Pursuant to this request, TAT members Dean Geers, S. Babusukumar, and Kenneth Myers met Ms. Hawvermale (IDEM) on May 19, 1986, and conducted a visual survey of the site.

The site is situated among a group of commercial buildings which border the property on the east and west. A residence and farm lie to the south of the site, across State Road 32. Uncultivated fields border the northern edge of the site. Approximately 50 yards to the northeast of the former building lies a ravine that descends 40 feet to a small stream. This intermittent stream flows northwesterly approximately 800 feet to its confluence with Little Sugar Creek. Sugar Creek is joined by Little Sugar Creek about two miles west of the site. The area bordering the ravine and stream is wooded with deciduous trees (Figure 2). The site, which is roughly two acres in size, housed one building which was completed razed in the 1969 fire. No evidence of debris from the fire remains except for the concrete slab foundation. Access to the site is completely unrestricted.

Two small structures lie directly north of the concrete slab (Figure 2). A concrete block pump house contained a pump and holding tank, indicating water was drawn from an on-site well. The poured concrete structure appears to have been an open top incinerator that may have been used by the P.R. Mallory facility. Fiberglass debris was dumped in the remains of the incinerator and the surrounding area.

Further to the northeast was the ravine which contained the previously-mentioned intermittent stream. Near the top of the ravine, a drain tile, believed to be from the adjacent W.M. Plastics facility, was observed discharging water along the embankment. A portion of the ravine embankment, approximately 400 square feet in surface area, is composed of discarded capacitors. The TAT estimates that the capacitors may be piled as much as three feet deep near the top of the



**FIGURE 2**

**SITE MAP**

**P.R. MALLORY**

**CRAWFORDSVILLE, INDIANA**

7/21 6/9/86

ravine. Most of the capacitors found on or near the surface were not intact. The estimated age of these capacitors, based on P.R. Mallory's operation dates, is 17 to 29 years. Another pile of capacitors was found approximately 10 yards south of the ravine's edge. It was apparent by the TAT's observations that other dumping had occurred along the ravine. Evidence of this dumping includes a pile of empty five gallon metal pails, an area covered with galvanized steel scrap, and an abandoned automobile. Photographs taken during the site assessment are included in Attachment A.

### 3.2 Summary of TAT Sampling Activities Conducted on May 19, 1986

During the site assessment, the TAT collected five on-site soil samples and one off-site soil sample to be analyzed for PCBs. Samples S-71, S-72, S-74, and S-75 (project #86CY04) were grab samples collected among the disposed capacitors. Sample S-73 consisted of stream sediments collected downstream from the capacitors. A background soil sample, sample S-76, was collected for quality assurance and quality control from the field west of the P.R. Mallory property. Sample locations are identified in Figure 3.

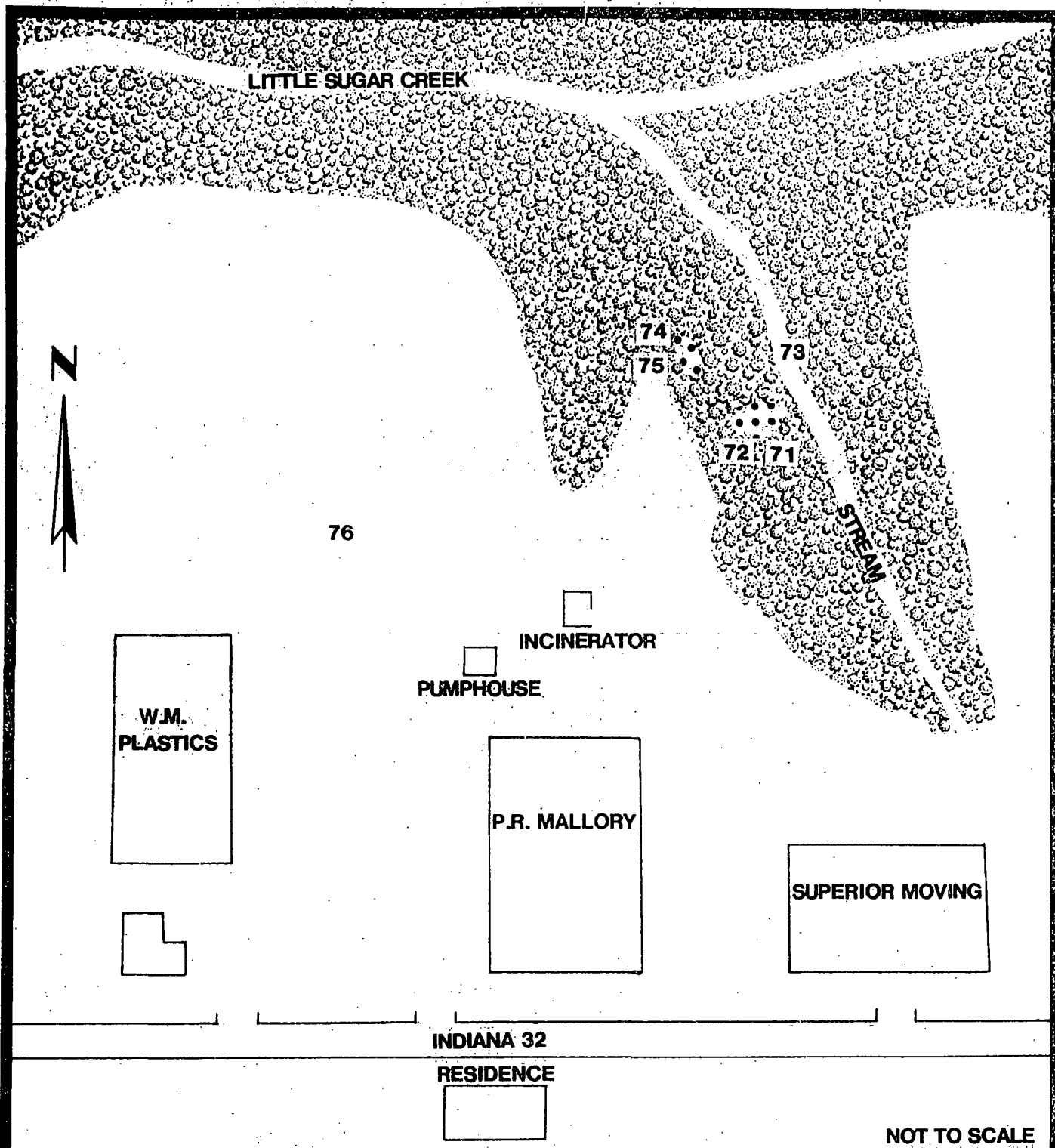
A decontamination procedure, utilizing a soap/water wash and clean water rinse, was used on the sampling equipment prior to the collection of each sample. All samples were collected and packaged according to U.S. EPA sampling and handling protocol.

### 3.3 Summary of Analytical Results

A summary of the analytical results for samples taken by the TAT on May 19, 1986, is provided in Table 1. All of the samples collected, including the background control sample, contained PCB concentrations above 50 ppm. Regulations promulgated under the Toxic Substances Control Act (TSCA) set forth specific management/disposal requirements for materials having PCB concentrations greater than 50 ppm. The high concentrations reported in the samples indicate that severe contamination at the site has occurred and poses a serious health threat to the environment and the public.

## 4.0 HEALTH AND ENVIRONMENTAL HAZARDS

PCBs present a serious threat to public health because they are believed to be persistent carcinogens in the environment and tend to bioaccumulate in the food chain due to their lipophilic nature. In general, PCBs are absorbed through all routes of exposure including: dermal, oral, and inhalation. The excretion of PCBs is, for the most part, quite slow;



**FIGURE 3**

**SAMPLE LOCATION MAP**

**P.R. MALLORY**

**CRAWFORDSVILLE, INDIANA**

YCM 6/9/86



thus, bioaccumulation occurs at low levels. PCBs have also been found to produce adverse reproductive effects in mammalian species (Kuratsune, 1976, Taki et al., 1969).

Among the symptoms documented from occupational exposures are mild irritation of the skin and eyes at levels above 0.1 mg/m<sup>3</sup>, nausea, digestive disturbances, headaches, upper respiratory problems, and persistent body odor. Although PCBs possess a low order of acute toxicity, the effects of chronic exposures to relatively low levels of PCBs have been well documented and are of greater concern.

While it has been reported that many PCB mixtures are carcinogenic in rodent bioassays, there is insufficient evidence concerning cancer risks for humans. However, based on data available, both the International Agency for Research on Cancer (IARC, 1978) and the U.S. EPA (EPA, 1978) have concluded that PCBs could be considered a potential human carcinogen.

In summary, the preliminary site assessment and sample analytical results indicate that the site conditions at P.R. Mallory represent a serious and imminent threat to human health and the environment. Since access to the site is unrestricted, direct public exposure to PCB-laden capacitors and PCB-contaminated soils on the site represents the most obvious immediate public hazard. A potential threat for human exposure is presented by the fact that the intermittent stream is tributary to Sugar Creek, a recreational stream used for fishing, swimming and canoeing.

## 5.0 RECOMMENDED ACTIONS

In light of the serious health and environmental threats at P.R. Mallory, the U.S. EPA requested that the TAT prepare an Emergency Action Plan. A three-phased plan of action is recommended for this site. The action plan includes:

- o Development of site safety and access control measures;
- o Development of a sampling plan to determine the extent of contamination;
- o Excavation, transportation, and disposal of capacitors and contaminated soil.

### 5.1 Site Safety and Access Control

A site safety and contingency plan addressing site hazards, levels of personnel protection, and chemical data information will be developed prior to the initiation of the removal work. Restricting access to the site will be accomplished with the placement of an eight foot high chain-link fence and warning signs around the perimeter of the site, demarcation of all work zones and contaminated areas, and the subcontracting of a security guard who will be present on site during all nonworking hours. All costs associated with preparation of the safety and contingency plans are included in the TAT costs of Section 6.5.

### 5.2 Extent-of-Contamination Studies

Based on the results of the TAT sampling performed on May 19, 1986, additional sampling is required to determine the extent of contamination. A square sampling grid measuring 10,000 square yards will be set up to encompass areas of concern. The sampling effort will include the perimeter of the concrete slab and back to the ravine, both sides of the ravine, sediments from along the intermittent stream downstream of the site, and the adjoining properties east and west of the site. All samples collected will be analyzed for PCB contamination.

Furthermore, it is possible that polychlorinated dibenzo-p-dioxins (dioxins) and polychlorinated dibenzofurans (furans) could have been generated as a result of the fire. To determine the existence of dioxin and/or furans, approximately five samples will be collected and analyzed for 2,3,7,8-TCDD isomers. A detailed sampling program will be prepared by the TAT and submitted prior to any action.

The TAT will conduct the extent of contamination sampling prior to mobilization of the cleanup equipment and personnel. All costs associated with the sampling program except the analytical costs are included in the TAT costs in Section 6.5.

### 5.3 Cleanup Activities

A backhoe and front-end loader will be utilized to collect the contaminated soil and capacitors and will transport the debris to the Visqueen-lined, concrete slab. The material will then be placed on a size 3 (3 inch) screen to separate the capacitors from the contaminated soil. The segregated capacitors will be placed in 30-gallon fiber drums for incineration. The remaining contaminated soil will be placed into lined, open box, semi-trucks (capacity of 30 cubic yards) for transportation to an approved PCB landfill. After removal of

all contaminated soil, the area along the ravine embankment will be backfilled and graded using approximately 100 cubic yards of rubble for bank stabilization. This area should then be reseeded.

The waste on site will require disposal at two different facilities. The majority of the waste, an estimated 1,000 cubic yards of contaminated soil, will require disposal at a federally-licensed landfill. Cost estimates are based on disposal at Chemical Waste Management Landfill in Emelle, Alabama. It is assumed that 50 truck loads will be required to transport the 1,000 cubic yards of soil. However, moisture, density, and material load type may influence this projection. The remaining waste, estimated to be 300 30-gallon fiber drums filled with capacitors, will be transported to a federally-licensed PCB incinerator. The SCA facility in Chicago, Illinois, is used for preparing cost estimates. Using 40 foot box trailers, it is expected that 3 loads will be required for transportation of the 300 drums to SCA.

#### 6.0 COSTS

The costs are based upon the following assumptions and conditions:

- o Personnel work 15 days, 10 hour/days
- o Security guard on site during all nonworking hours
- o 1,000 cubic yards of PCB-contaminated soil to be transported to Chemical Waste Management Landfill in Emelle, Alabama.
- o 300 30-gallon fiber drums containing capacitors to be transported to the SCA Incinerator in Chicago, Illinois.

Due to the unknown magnitude and extent of off-site contamination, the associated costs are estimates for on-site clean-up activities only. Pending the analytical results of the extent-of-contamination study (Section 4.2), additional material, both on-site or from adjacent properties, may require cleanup and disposal at an additional cost.

### 6.1 Personnel

<u>Item</u>	<u>Days</u>	<u>Amount</u>
1 Response Manager @ \$58.40/hr; OT \$71.30/hr	15	\$9,147.00
1 Foreman, Level 3, @ \$357.40/hr; OT \$49.10/hr	15	5,961.00
3 Equipment Operators, Level 2, @ \$31.00/hr; OT \$42.10/hr	15	14,949.00
4 Cleanup Technicians, Level 2, @ \$25.70/hr; OT \$35.10/hr	15	16,548.00
9 Per diems @ \$66.15/day	15	8,930.25
1 Security guard @ \$8.20/hr; OT \$11.10/hr	19	3,048.60
Subtotal		\$58,583.85

### 6.2 Equipment

<u>Item</u>	<u>Days</u>	<u>Amount</u>
1 Backhoe, Case 225 @ \$512.00/day	15	\$7,680.00
2 Front-end loaders, 4.5 yd, @ \$433.00/day	15	12,990.00
1 Office trailer @ \$75.00/day	15	1,125.00
1 Decon trailer @ \$326.00/day	15	4,890.00
1 Passenger sedan @ \$53.00/day	15	825.00
1 Passenger van @ \$71.00/day	15	1,065.00
1 Pick-up truck @ \$62.00/day	15	930.00
1 Decon pad @ \$38.00/day	15	570.00
1 High pressure washer, 1200 psi @ \$176.00/day	15	2,640.00

Equipment (Continued)

<u>Item</u>	<u>Days</u>	<u>Amount</u>
8 Level C protection @ \$62.00/day	15	\$7,440.00
4 OTR tractors @ \$301.00/day	2	2,408.00
2 Lowboys @ \$218.00/day	2	872.00
Mobilization and demobilization		1,594.40
	Subtotal	\$45,029.40

6.3 Materials

<u>Item</u>	<u>Amount</u>
Approximately 800 ft of 8 ft chain-link fence and access gate, installed	\$8,000.00
Telephone hook-up and 1 month service	500.00
Electric hook-up and 1 month service	500.00
300 30-gallon fiber drums @ \$5.00/ea	1,500.00
100 cu yd Rubble @ \$10.00/yd delivered	1,000.00
100 Rolls of Visqueen @ \$100.00/roll	10,000.00
50 Pair of Viton gloves @ \$30.00/pair	1,500.00
Sample analysis 150 PCB samples @ \$75.00/sample	11,250.00
Sample analysis 5 dioxin and furans @ \$1,300/sample	6,500.00
	\$40,750.00
3% Handling Costs	1,222.50
	Subtotal \$41,972.50

#### 6.4 Transportation and Disposal

<u>Item</u>	<u>Amount</u>
50 Loads @ \$4.00/loaded mile x 440 miles (Crawfordsville, Indiana, to Emelle, Alabama)	\$88,000.00
3 Loads @ \$4.00/loaded mile x 150 miles (Crawfordsville, Indiana, to Chicago, Illinois)	1,800.00
1,000 cu yd landfill @ \$166.00/yd	166,000.00
300 Fiber drums for incineration @ \$125.00/drum	37,500.00
	<u>\$293,300.00</u>
3% Handling Costs	8,799.00
	<u>\$302,099.00</u>

#### 6.5 Cost Summary

<u>Item</u>	<u>Amount</u>
Personnel	\$58,583.85
Equipment	45,029.40
Materials	41,972.50
Transportation and Disposal	<u>302,099.00</u>
	\$447,684.75
TAT Costs	10,000.00
Contingency 15%	67,152.71
	<u>\$524,837.46</u>

or say

\$524,900.00

TABLE 1

RESULTS OF PCB SAMPLING BY TAT AT  
P.R. MALLORY, CRAWFORDSVILLE, INDIANA\*  
(Concentrations in ppm)

<u>Station</u>	<u>Location</u>	<u>Results</u>
S-71	Soil-approximately 15 feet down embankment among capacitor pile	65,495
S-72	Soil-approximately 5 feet down embankment among capacitor pile	140,253
S-73	Stream sediment-directly below capacitor pile	9,695
S-74	Soil-among capacitors approximately 20 feet south of embankment	165,402
S-75	Soil-among capacitors approximately 20 feet south of embankment	86,324
S-76	Soil-control sample taken approximately 50 yards into field adjacent to site	326

\*Samples analyzed by Suburban Laboratories.

ATTACHMENT A  
SITE PHOTOGRAPHS



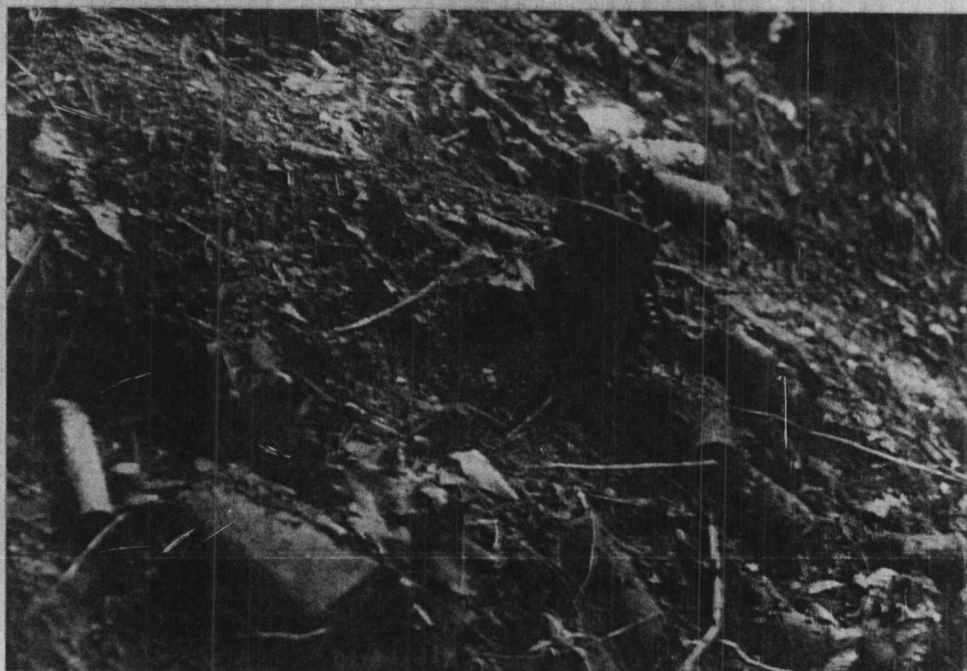
#1  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors dumped in ravine  
north of concrete slab  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#2  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors in ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#3  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors in ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs





#4  
P.R. Mallory, Crawfordsville,  
Indiana  
Drain tile, believed to be  
from adjacent W.M. Plastics  
facility  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#5  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors in ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#6  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors in ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#7

P.R. Mallory, Crawfordsville,  
Indiana

Rusted 5 gal pails near  
ravine

Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#8

P.R. Mallory, Crawfordsville,  
Indiana

Debris pile near ravine

Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#9

P.R. Mallory, Crawfordsville,  
Indiana

Capacitor near edge of  
ravine

Photographer: Dean Geers  
5-19-86, 1220-1400 hrs





#10  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors near edge of  
ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



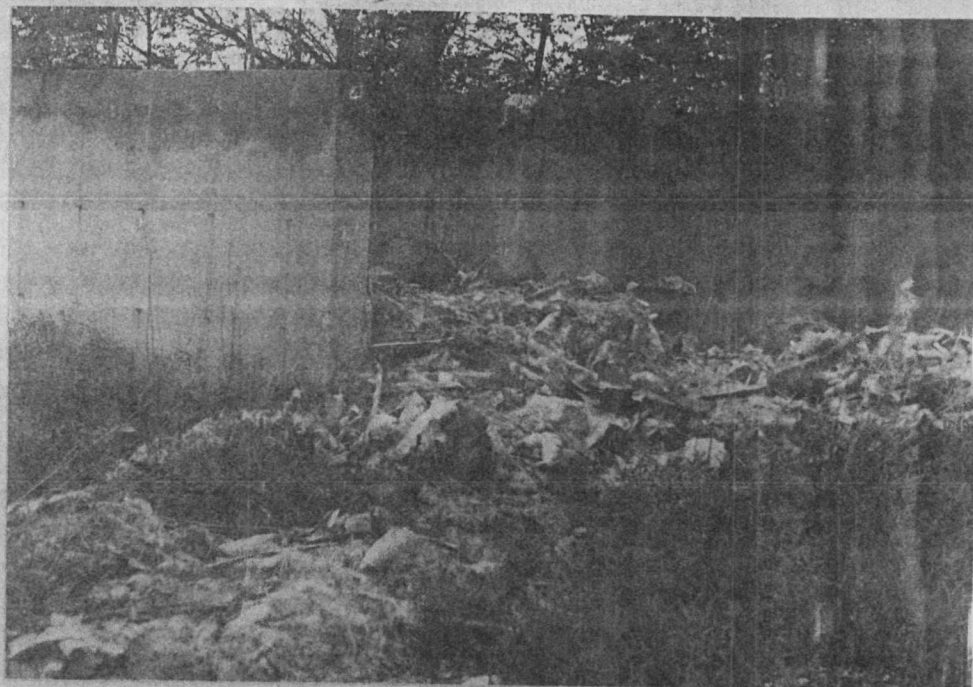
#11  
P.R. Mallory, Crawfordsville,  
Indiana  
Scrap steel in ravine, east  
of capacitors  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#12  
P.R. Mallory, Crawfordsville,  
Indiana  
Capacitors near edge of  
ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#13  
P.R. Mallory, Crawfordsville,  
Indiana  
Scrap fiberglass around  
incinerator north of concrete  
slab  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs

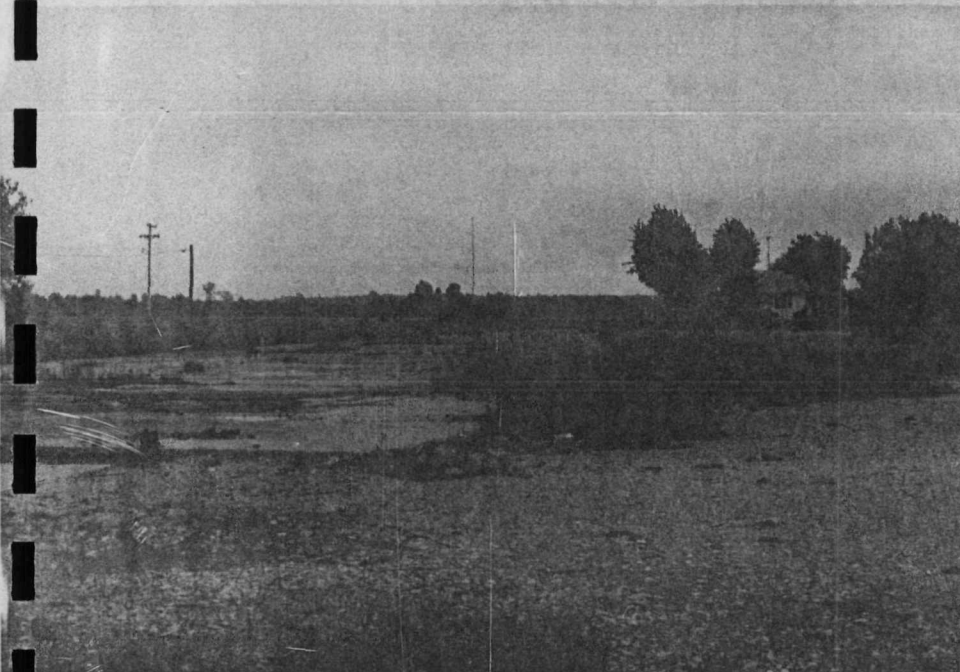


#14  
P.R. Mallory, Crawfordsville,  
Indiana  
Incinerator north of concrete  
slab  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#15  
P.R. Mallory, Crawfordsville,  
Indiana  
Concrete slab where building  
once stood. View looking S-SW  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs

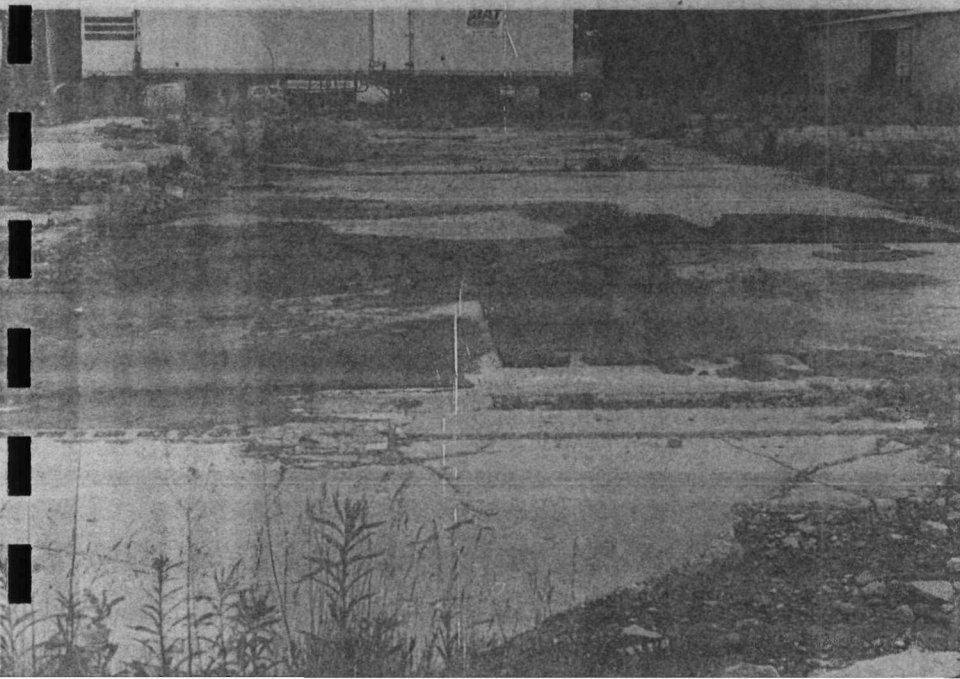




#16  
P.R. Mallory, Crawfordsville,  
Indiana  
Concrete slab where building  
once stood. View looking S-SE  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#17  
P.R. Mallory, Crawfordsville,  
Indiana  
Sampling of soil halfway down  
ravine  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#18  
P.R. Mallory, Crawfordsville,  
Indiana  
Concrete slab. View looking  
east  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#19

P.R. Mallory, Crawfordsville,  
Indiana

Sampling of soil under pile  
of capacitors near ravine

Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



#20

P.R. Mallory, Crawfordsville,  
Indiana

Collection of background soil  
samle in adjacent field.

Pump house in foreground  
Photographer: Dean Geers  
5-19-86, 1220-1400 hrs



ATTACHMENT B  
IDEM SAMPLE RESULTS



STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

TO: Kevin M. J. Hogan  
Special Projects Section

FROM: Gregory A. Busch *DOB 5/14*  
Quality Assurance Officer

SUBJECT: Review of Laboratory Results for P. R. Mallory  
Montgomery County, Collected on April 15, 1986

DATE: May 13, 1986

THRU: Jack C. Corpuz *jc 5/14/86*  
James E. Traylor *JET 5/15*  
Dan B. Magoun *DBM 5/15*  
George E. Oliver *GO 5/15*

I have reviewed the attached laboratory results. I have determined that the results are acceptable for use in enforcement actions. These results have been evaluated based on the quality criteria contained in the Indiana Quality Assurance Project Plan.

Sample C0595 contains 51 percent PCB's, C0596 is 100 percent PCB's, and C0597 has 66 ppm PCB's. These are all TSCA regulated wastes.

GAB/cl  
Attachments

## DIRECT INQUIRIES TO :

EMS LABORATORIES, INC.  
7901 WEST MORRIS STREET  
INDIANAPOLIS, INDIANA 46231  
(317) 243-8304

FINAL REPORT ON SAMPLE : 64044 00

DATE RECEIVED : 04/17/86 DATE COMPLETE : 04/23/86

DESCRIPTION 1 : C0595  
DESCRIPTION 2 : CAPACITOR FOR EMS (HRG) TO OPEN  
DATE SAMPLED : 4/15/86 TIME SAMPLED : 10:45AM

## REPORT TO :

GREG BUSCH  
INDIANA STATE BOARD OF HEALTH  
1330 WEST MICHIGAN STREET  
INDIANAPOLIS IN 46204

## BILL TO :

APR 23 11 52 AM '86  
POLICE  
604044 001 1711

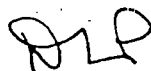
TEST DESCRIPTION	RESULT	DET. LIMIT	UNITS	METHOD	ANALYST	DATE
PCB, GAS CHROMATOGRAPHY:ECD .. AROCLOR 1016 .....	ND	1.0	MG/KG	EPA 608	LVO	04/22/86
AROCLOR 1221 .....	ND					
AROCLOR 1232 .....	ND					
AROCLOR 1242 .....	ND					
AROCLOR 1248 .....	ND					
AROCLOR 1254 .....	478160					
AROCLOR 1260 .....	32560					
PCB EXTRACTION, CLEAN OIL .....	COMPLETE	NA	NA		LVO	04/22/86

ND - ANALYTE NOT DETECTED AT DETECTION LIMIT INDICATED

NA - NOT APPLICABLE

SAMPLE WAS ACCOMPANIED BY CHAIN OF CUSTODY PAPERS

APPROVED BY :



PAGE 1 OF 1

## DIRECT INQUIRIES TO :

FINAL REPORT ON SAMPLE : 64045 00

EMS LABORATORIES, INC.  
7901 WEST MORRIS STREET  
INDIANAPOLIS, INDIANA 46231  
(317) 243-8304

DATE RECEIVED : 04/17/86 DATE COMPLETE : 04/24/86

DESCRIPTION 1 : C0596  
DESCRIPTION 2 : CAPACITOR FOR EMS (HRG) TO OPEN  
DATE SAMPLED : 4/15/86 TIME SAMPLED : 10:50AM

## REPORT TO :

GREG BUSCH  
INDIANA STATE BOARD OF HEALTH  
1330 WEST MICHIGAN STREET  
INDIANAPOLIS IN 46204

## BILL TO :

APR 23 4 32 PM '86  
DIVISION OF LABOR  
POLICE & FIRE  
BOARD OF HEALTH

TEST DESCRIPTION	RESULT	DET. LIMIT	UNITS	METHOD	ANALYST	DATE
PCB, GAS CHROMATOGRAPHY:ECD .. AROCLOR 1016 .....	ND	1.0	MG/KG	EPA 608	LVO	04/22/86
AROCLOR 1221 .....	ND					
AROCLOR 1232 .....	ND					
AROCLOR 1242 .....	1000000					
AROCLOR 1248 .....	ND					
AROCLOR 1254 .....	ND					
AROCLOR 1260 .....	8000					
PCB EXTRACTION, CLEAN OIL .....	COMPLETE	NA	NA		LVO	04/22/86

ND - ANALYTE NOT DETECTED AT DETECTION LIMIT INDICATED

NA - NOT APPLICABLE

SAMPLE WAS ACCOMPANIED BY CHAIN OF CUSTODY PAPERS

APPROVED BY :



PAGE 1 OF 1

DIRECT INQUIRIES TO :

FINAL REPORT ON SAMPLE : 64046 00

EMS LABORATORIES, INC.  
7901 WEST MORRIS STREET  
INDIANAPOLIS, INDIANA 46231  
(317) 243-8304

DATE RECEIVED : 04/17/86 DATE COMPLETE : 04/24/86

DESCRIPTION 1 : C0597  
DESCRIPTION 2 : CAPACITOR FOR EMS (HRG) TO OPEN  
DATE SAMPLED : 4/15/86 TIME SAMPLED : 11:00AM

REPORT TO :

GREG BUSCH  
INDIANA STATE BOARD OF HEALTH  
1330 WEST MICHIGAN STREET  
INDIANAPOLIS IN 46204

BILL TO :

APR 25 4 32 PM '86  
DIVISION OF LAND  
POLLUTION CONTROL  
STATE OF INDIANA  
BOARD OF HEALTH

TEST DESCRIPTION	RESULT	DET. LIMIT	UNITS	METHOD	ANALYST	DATE
PCB, GAS CHROMATOGRAPHY: ECD .. AROCLOR 1016 .....	ND	1.0	MG/KG	EPA 608	LVO	04/22/86
AROCLOR 1221 .....	ND					
AROCLOR 1232 .....	ND					
AROCLOR 1242 .....	ND					
AROCLOR 1248 .....	54					
AROCLOR 1254 .....	11					
AROCLOR 1260 .....	1.0					
PCB EXTRACTION, CLEAN OIL .....	COMPLETE	NA	NA		LVO	04/22/86

ND - ANALYTE NOT DETECTED AT DETECTION LIMIT INDICATED

NA - NOT APPLICABLE

SAMPLE WAS ACCOMPANIED BY CHAIN OF CUSTODY PAPERS

APPROVED BY :

*DLP*

PAGE 1 OF 1